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PROGRAM MANAGEMENT COURSE
INDIVIDUAL STUDY PROGRAM

LOGISTICAL FIELD SUPPORT
OF ARMY
MAJOR WEAPONS SYSTEMS

STUDY PROJECT REPORT
PMC 77-1

KENDALL KARL McINTYRE
MAJOR US Army

FORT BELVOIR, VIRGINIA 22060

LOGISTICAL FIELD SUPPORT OF ARMY MAJOR WEAPONS SYSTEMS

Study Project Report

Individual Study Program

Defense Systems Management College

Program Management Course

Class 77-1

by

Kendall Karl McIntyre
Major US Army

May 1977

Study Project Advisor
Mr. Wayne Schmidt, DSMC

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DEFENSE SYSTEMS MANAGEMENT COLLEGE

STUDY TITLE:

LOGISTICAL FIELD SUPPORT OF ARMY MAJOR WEAPON SYSTEMS

STUDY PROJECT GOALS:

To gather data concerning the formulation and growth of the Army Direct Support System (DSS), and to evaluate the systems peacetime doctrine.

STUDY REPORT ABSTRACT:

The Direct Support System as a means of logistical support to the Army's major weapon systems have proven viable. The steadily increasing cost of field support however requires continued improvement in system management. Through improved communication and transportation modes, DSS has reduced the total Order Ship Time cycle and increased customer satisfaction. "Inventory in Motion" is no longer a principle, but a live, fast-paced logistics system.

SUBJECT DESCRIPTORS: Direct Support System, Army Weapons Support.

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EXECUTIVE SUMMARY

The purpose of this paper is to commit to report form the extensive findings compiled through research into the background, development and current status of the Army method of supporting major weapons systems in the field during peacetime -- the Direct Support System (DSS). A major operations and support cost driver has historically been the cost of "on hand" repair parts. DSS has evolved in an attempt to reduce this high cost factor by rapidly supporting using unit requirements directly from designated CONUS depots.

Rapid and cost effective support can only be accomplished by the use of improved communications, materiel tracking methods, and modern transportation modes. The designation of three distribution depots in CONUS and the concentration of DSS eligible repair parts at these depots has given the DARCOM community the ability for rapid response at greatly reduced costs.

An extensive, in-depth analysis of the Order Ship Time (OST) segments contained in the system has shown areas of concentrated effort and extensive management in an all-out attempt to meet or exceed the established time segment goals. Continued monitoring of segments not meeting established goals should be accomplished by HQ, DARCOM to ensure that realism and flexibility to meet changing conditions are an inherent part of each time segment.

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INDEX (continued)

LOGISTICAL FIELD SUPPORT
OF ARMY
MAJOR WEAPONS SYSTEMS

Introduction

The role that logistics support systems are playing in field support of the Army's major weapons systems has become a significant cost parameter of concern not only to the Army, but OSD and the Congress. The lack of adequate repair parts at the place and time required results in equipment being placed in a Not Operationally Ready Supply (NORS) status. Conversely, excessive repair parts on hand are expensive to purchase, store, inventory and maintain.

In developing the Direct Support System, the Army has bridged the gap between excess and too little. With the advent of faster communications from the field, repair parts as well as other classes of supply can be shipped from a CONUS distribution depot to the supporting unit in a greatly reduced time frame.

Improved communications and faster transportation has reduced the need for intermediate levels of supply and major in-country depots. Increased ability to accurately monitor the flow of supplies allows for diversion and consolidations in a timely manner. In addition, containerizing and palletizing cargo has considerably reduced intransit materiel loss.

This research paper culminates an in-depth study of performance measurement within the Order Ship Time (OST) segments of the Direct Support System (DSS), and analyzes in turn, each of these segments. Only by an understanding of the functions performed within each OST segment, can the reader pass judgement on the validity of the measurement criteria. In addition, it is this writer's intent to identify and surface system problems, and to portray some of the reasons that these problems exist. Hopefully, this paper will offer to the reader a mechanism for gaining [illegible]tional insight into the Direct Support System and its a[illegible]tion of field support.

General

The Direct Support System (DSS) is the Army standard supply system for selected classes of supplies. These classes of supplies include materiel such as repair parts, packaged petroleum, major end items, construction materiel, and individual clothing. Basically, the DSS concept envisions direct delivery of shipments from CONUS wholesale depots to a supply support activity (SSA), reducing/eliminating the need for the intermediate levels of stocks. The primary objectives include improved supply responsiveness through reduced Order Ship Times, reduction of inventories at the intermediate levels resulting in reduced costs, and improved visibility of requisitions and intransit materiel.[1]

[1]U.S. Department of the Army, Field Manual 38-725, Direct Support System (DSS)(Washington: Government Printing Office, January, 1976), p. 1-2.

Background

During the Vietnam buildup, repair parts were being stocked at unit level by the thousands (as many as 5,000 lines). At the next level is the direct support unit where as many as 30,000 lines were being stocked. At the general support level there were 30,000 - 50,000 lines, and in Europe, as many as 70,000 lines. Combat experience proved that the number of lines stocked at all levels could be reduced. Desired stockage at unit level 100 - 500 lines, direct support level 2,000 - 4,000 lines, and at general support 20,000 lines. Overseas base depots could manage with 40,000 - 60,000 lines. Slow moving items would be maintained in CONUS in the Army Materiel Command (now DARCOM) depots.

The secret to stockage levels is demand criteria. What must be stocked? How many demands are needed to justify stockage at the various echelons? Prior to 1969, items were stocked at the DSU/SSA on a basis of three demands in 360 days. In 1969, the demand criteria was modified to read six demands in 360 days.

The "Logistics Offensive" was underway. Inventory in motion was the keystone in the "Logistics Offensive," in that it integrated a number of complimentary techniques. It provides better support at less expense by reducing stocks of supplies on the ground and related storage costs through greater asset visibility and control. DSS is an integrated supply, maintenance and transportation concept which has as its

ultimate goal non-stop supply support direct from CONUS to the direct support level. A primary objective of this concept is the substitution of transportation for pipeline and prepositioned stocks, as transportation and communication capabilities increase.[2]

Included in the direct delivery concept is increased/improved asset visibility which reduces the requirement for supplies and improves distribution to an overseas theater as well as lateral distribution within a theater. There is however, an additional need for improved packaging, containerization and subcontainerization. This will permit faster deliveries to the DSU/SSA consumer level, reducing stockage requirements.[3]

An integral part of the DSS is a Logistics Intelligence File (LIF), maintained by the Logistics Control Activity (LCA)--which provides intransit visibility of pipeline assets. The LIF effectively interfaces supply and transportation documentation to provide top level management, an independent source of performance data and a complete overview of the total logistical pipeline.[4]

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[2]Military Supply System, 1970, Hearings Before a Subcommittee of the Committee on Government Operations, House of Representatives, Ninety-First Congress Second Session, August 4 and 5, 1970. Testimony given by Lt Gen Joseph M. Heiser, Jr. (Washington: Government Printing Office, 1970), p. 188, 189.

[3]Ibid.

[4]Ibid.

Direct Support Test

The Army Materiel Command logistics support plan outlined in DA Circular 700-18, 28 November 1969, "Logistics Improvements," provide guidance and direction to assure maximum theater-oriented services as a result of reduced TASL/ASL's worldwide. To fully develop the direct delivery concept into a workable system, a test with USAEUR was approved to begin 1 July 1970. Full application of the test was expected to reduce Order Ship Time from 80 to 35 days.

Order Ship Time segments (nodes) are grouped into four major elements for analysis, (I) Order Time, (II) CONUS Supply Time, (III) Transportation, and (IV) DSU Receiving. The analysis is based on data contained in the Logistics Intelligence File and on shipping data collected by the Logistics Control Activity. Therefore, it is based only on that portion of the DSU/SSA business (requisitions) which come to CONUS. Satisfactory performance within each time segment (node) equates to meeting the segment standard allowance 80 percent of the time.

Variables Affecting DSS Order Ship Time

A. Requisitioning and Passing Actions: Standard-Variable.

Europe - 5 days

USARPAC - 7 days

CONUS - 5 days

Frequent changes in the DSU/SSA ASL and theater TASL cause turbulence and slowing of segment processing time.

The DSU/SSA must also process catalog changes in a timely manner to up-date their ASL listings. Failure to do so results in "hand massaging" requests resulting in an increase in time within this segment. In addition, high zero balance levels, poor storage and warehousing procedures, and a low location accuracy results in additional requisitions introduced into the DSS. As in any system, an unplanned increase in volume tends to slow the system.

Post Vietnam has given the Army a reduction in operating funds resulting in the requirement for commanders to manage funds made available more realistically. This means that at the DSU/SSA level, there are varied reductions in the ASL, and closer supervision of high dollar requisitions. Untrained and unskilled personnel at the DSU/SSA and command levels brings about an automatic slowing of the DSS.

B. NICP Processing: Standard - 3 days.

Many low dollar value items are computer managed rather than managed by human beings. These items are routinely processed at the NICP. As fast and accurate as computers are, they are subject to "down time" caused by system failures or maintenance problems. In view of the complexity of our existing computer system, when problems with the computer develop, routine requisitions are not manually processed but are held on file until the computer is again operational.

Various system changes at the NICP occur periodically to upgrade the services provided. An example of this is the change-over to the ALPHA computer system. During the change-

over period, a very limited number of routine requisition cycles are processed, limiting the MRO flow to the depots.

Occasionally, items requested are at a zero balance point within the NICP depot inventory, or time consuming research is required to determine if a substitute item can be made available. This action may be handled "off line," not by the computer but by NICP research personnel.

NICP's are located throughout CONUS and a simple thing as a winter storm or power failure occasionally prevent personnel from reporting to work. In addition, recent reductions in the personnel force has impacted the speed in which requisitions are being processed.

C. Depot Processing: Standard - 5 days.

Previously mentioned in the NICP explanation, depot activities are also computerized and must be in synchronization with the NICP computer operation. Failure to do so results in Materiel Release Orders (MRO's) being sent to the depot during a time when there is a minimum amount of the work force available. When this does occur, not only is the system slowed, but additional funds must be expended by the depot for the payment of overtime or "call back" time for their personnel.

During the computer system change-over period at the NICP, depots often received an excess of MRO's for greater than their normal capacity to process within established time segments. This was a result of the NICP not being able to maintain an even flow of MRO's during the change-over period.

Predominantly a civilian force, depot personnel in recent years, have undergone reductions in force creating turbulence, transfers, and unrest. The results of this at a number of depots was a reduction in productivity.

D. Intransit to CCP: Standard - 2 days.

It is this writers belief that the established two day segment standard is completely unrealistic. This standard was established with the assumption that the majority of DSS MRO's would be directed to the area oriented depots serving the requisitioning customer. The assumption was also made that the majority of DSS stocks would be located at the area oriented depots. This may become true as time passes, however, it is not true today, and has not been true since the beginning of DSS in July 1970.

NICP's have been directing new procurement items to the area oriented depots and are also directing that some inter depot transfers of stock be made. If in future years, the area oriented depots are stocking the majority of DSS required items, then the two day time standard may be excessive. Until that time, it is not physically possible to transport over the highways, DSS cargo from Sacramento Army Depot in California to the CCP located at New Cumberland Army Depot in Pennsylvania within the established two day time segment. General Service Administration (GSA) depots as well as Defense Logistics Agency (formerly DSA) depots located throughout the country experience the same difficulties in meeting the two day goal.

In addition, local politics enter the picture whenever stocks at a depot or personnel are reduced. Often, political involvement delays or suspends activities of this nature.

E. Intransit to CRP: Standard - 2 days.

We find the same situation here as in the intransit time segment from the depots to the CCP. Unlike the CCP (there are three in CONUS), every major installation has or is scheduled to have a Central Receiving Point (CRP). This fact lessens the transportation distances from many depots, and extends it from others. An example of distance lengthening would be when a unit located at Fort Ord, California, requests an item and the NICP directs the MRO to Tobyhanna Army Depot in Pennsylvania (because it is the only depot that has the item in stock). Over the highways transportation from depot to customer cannot be accomplished within the two day time segment standard. Only when the area oriented depots have sufficient DSS stock to satisfy area requirements will the two day time segment be a viable one.

Movement of cargo from the various depots to the CRP's is accomplished by commercial transporters. Labor strikes, availability of fuel, and weather conditions are but a few of the "things" that can hamper the movement of DSS cargo within CONUS. Depots will also tend to hold cargo as long as possible in hopes that additional cargo for the same destination will be generated giving the government a better rate (cost) from the commercial transporter. The rate charged to transport a full truckload of cargo to a single destination is less than

a partial truckload to the same destination.

F. CCP Processing, Intransit to the POE, POE Processing: Standard - Variable.

Europe	-	10 days
Korea	-	14 days
Okinawa	-	14 days
Thailand	-	14 days
Japan	-	16 days
Hawaii	-	11 days
CONUS	-	NA

Prior to July 1974, these segments were separate and distinct with the following time segment standards applying:

CCP Processing	-	3 - 6 days
Intransit to POE	-	2 days
POE Processing	-	2 days

The CCP's requested from HQ AMC (DARCOM) and the Department of the Army that these segments (nodes) be consolidated and that the CCP's be made responsible for meeting the consolidated time segment standards. Rationale for this request was as follows:

1. The ship sailing schedules from the POE's are variable and uncertain.

2. Many seavan/containers were sent to the POE with excess of cargo carrying capacity unused. This was caused by low cargo generation as well as the time segment of 3 - 6 days placed on the CCP to consolidate cargo and transport the seavan/container to the POE. This segment included receipt

of cargo, consolidation of cargo, loading the seavan/container with cargo, documentation, and submitting the seavan/container to the transportation office for movement to the POE. This situation produced less than desirable results.

3. Distance from the CCP's to the POE is less than 200 miles, and may be traveled in one day or less. The time segment was two days.

4. The POE hold time segment standard was established at two days. Because of the increase in seavan/container traffic at the ports, military as well as civilian, the POE did not want the seavan/container to arrive earlier than 24 hours prior to the ship sailing date.

The CCP's contended that if these time segments were merged, the following would occur:

The CCP would be notified when the next ship would be sailing to a POE. This would cause the CCP to:

a. Move the seavan/container to the POE to meet the 24 hours prior to ship sailing date, causing it to be loaded to the maximum extent with DSS cargo.

b. Reduce the congestion of seavan/containers at the POE several days prior to the ship sailing date.

c. Make maximum use of the limited number of seavan/containers made available to the CCP.

The CCP proposal was adopted, and the CCP increased the average cargo load within a seavan/container from 45 - 63 percent fill at the three day CCP time segment standard, to

77 - 82 percent fill currently. Because of the three stop destination limitation placed on the seavan/container in the overseas theater, and the undergeneration of cargo for some DSU/SSA's, it is this writers opinion that the CCP's have reached the optimum average of seavan/container filling. Many of the ocean carriers are now changing from 20 to 40 foot seavan/containers. As this change-over takes place, the CCP's are again faced with the problems of consolidating sufficient cargo to fill the larger seavan/container. A possible solution may be to expand the development and use of sectional containers that could be placed together to form a 20, 35, or 40 foot seavan/container.

G. Intransit to POD: Standard - Variable.

Europe	-	10 days
Korea	-	15 days
Okinawa	-	18 days
Thailand	-	32 days
Japan	-	12 days
Hawaii	-	5 days
CONUS	-	NA

Because of the varying distances from CONUS POE's to destination POD's standards are established according to destination. With the advent of larger, faster seavan/container ships, and the nonavailability of sufficient ports to accommodate these larger ships, many seavan/containers destined for various POD's must be offloaded at the large

intermediate ports and transferred to smaller inter-coastal seavan/container ships that can be accommodated at the destination POD. The transfer time and the slower speed of the inter-coastal seavan/container ships add to this time segment standard, and the total OST. In addition, the recent fuel crisis has forced ocean carriers to slow their speed, thereby reducing the fuel requirement for the voyage. Also, occasional maintenance problems cause delays in the sailing schedule and/or increased voyage time.

The Department of Defense depends almost entirely on civilian operated ocean carriers to transport seavan/containers. Civilian ocean carriers are subject to labor disputes not only within their own company, but are at the mercy of longshoremen and port pilot unions at the POE and the POD.

H. POD Processing: Standard - Variable.

Europe	-	2 days
Korea	-	3 days
Other USARPAC	-	1 day
CONUS	-	NA

The standard time in this segment varies according to the destination POD. Because of the facilities differences (offloading, staging, personnel, and administration), the time segment for each port must be established separately. Functions of the POD are as follows:

a. Berth the vessel.

b. Offload the vessel.

c. Stage seavan/containers.

d. Transceive to the LCA receipt of the seavan/containers.

e. Notify transportation that the seavan/containers are available for in-country movement.

f. The transportation activity at the port will offer to a commercial transporter (rail or truck) the seavan/container for movement to the DSU/SSA.

Ports are normally operated by civilian personnel, and are subject to labor disputes, strikes, maintenance problems, and weather conditions, which affect port operations.

I. Intransit to the DSU/SSA: Standard - Variable.

Europe	-	3 days
USARPAC	-	1 day
CONUS	-	NA

In Europe, most seavan/containers are shipped from the port to the DSU/SSA by rail. This causes time to be devoted to the loading of the rail car, merging the rail car into a train, movement, switching, and offloading at an intermediate destination. At the intermediate destination, seavan/containers are moved by truck to the DSU/SSA location. Because of the intricacies in the transportation system and the distances to the DSU/SSA's from the port, three days are allotted for this time segment standard.

In the Pacific, most of the DSU/SSA's are located close to the ports, therefore, truck transportation is used to move the seavan/containers from the port to final destination.

In both areas, additional time is consumed if the seavan/container is loaded as a "stop off" van. This means that the seavan/container would stop at one DSU/SSA, the cargo for that DSU/SSA would be offloaded, the seavan/container would then be transported to a second and third DSU/SSA before it would be completely empty. This type of shipment often requires total or additional segment time. Allowing the CCP additional time to consolidate cargo has greatly reduced the number of "stop off" seavan/container shipments.

J. CRP Receipt to Delivery: Standard - 1 day.

CONUS CRP's operate as break bulk freight forwarder units. Their mission is to offload containers at CONUS installations, prepare receipt data, transceive this data to the LCA, and deliver the cargo to the various units located on the installation. Most CRP's conduct their operation using shifts, which include skeleton workforce (minimum personnel) during the weekend and holiday periods. The time standard of one day is being met at some installations, but not CONUS wide. Again, there is a shortage of trained/skilled personnel, materiel handling equipment, and in some areas, a lack of command interest/emphasis concerning this operation.

K. DSU/SSU Processing: Standard - 5 days.

Within this time segment, the DSU/SSA's are given five consecutive days after receipt of the seavan/container to:

1. Offload the seavan/container.

2. Process receipts through the NCR 500 or DLOG computer system. This process up-dates the inventory records for accounting purposes.

3. Place the items (ASL materiel) in proper storage locations. Issue items (non ASL materiel) to supported units.

4. Annotate DSS keypunch cards with materiel receipt date.

5. Transceive to the LCA receipt information that will be used to complete each shipment transaction within the LIF.

6. If the DSU/SSA is a "drop point" for other DSU/SSA's, materiel will be segregated and held until the DSU/SSA picks up.

Rarely have the DSU/SSA elements completed these requirements within the established time segment goal. Causes for this can be attributed to:

1. Untrained/unskilled personnel.

2. Shortage of personnel.

3. Shortage of operational materiel handling equipment.

4. DSU/SSA personnel not working shifts or weekends.

5. Lack of command emphasis on this program

DSS-TEST-EUROPE

ORDER SHIP TIME

80 PERCENT OF REPLENISHMENT REQUISITIONS

1970

OST SEGMENT	STANDARD IN DAYS
Order time	5
NICP Processing	2
Depot Processing	7
Intransit to CCP	1
CCP Processing	3
Intransit to POE	2
POE Hold	2
Sea Time	8
POD Hold	2
Intransit to DSU	2
DSU Processing	1
Total	35

Standards are shown in calendar days.

Interim Evaluation/In Process Review Report of the Direct Support System (USAREUR). 1 July - 31 October, 1970. Dated 20 November 1970, p. B-2

DSS-TEST-EUROPE-KOREA

ORDER SHIP TIME

80 PERCENT OF REPLENISHMENT REQUISITIONS

1972

PIPELINE NODES	EUROPE	KOREA
DSU to Transceiver	1	1
Transceiver to IMC	1	1
IMC Processing	4	4
IMC to NICP	1	1
NICP Processing	3	3
Depot Processing	7	7
Depot to TODC (CCP)	1	1
TODC (CCP) Hold	3	3
TODC (CCP) to POE	2	2
POE Hold	2	2
Intransit POE to POD	12	15
POD Hold	2	2
Intransit to DSU/SSA	3	1
DSU/SSA Posting	3	3
	Total . . . 45	Total . . 46

Standards are shown in calendar days.

U.S. Department of the Army, Pamphlet No. 700-22, Logistics, Direct Support System (DSS). (Washington: Government Printing Office, 3 October 1970). p. 9.

DSS ORDER SHIP TIME

80 PERCENT OF REPLENISHMENT REQUISITIONS

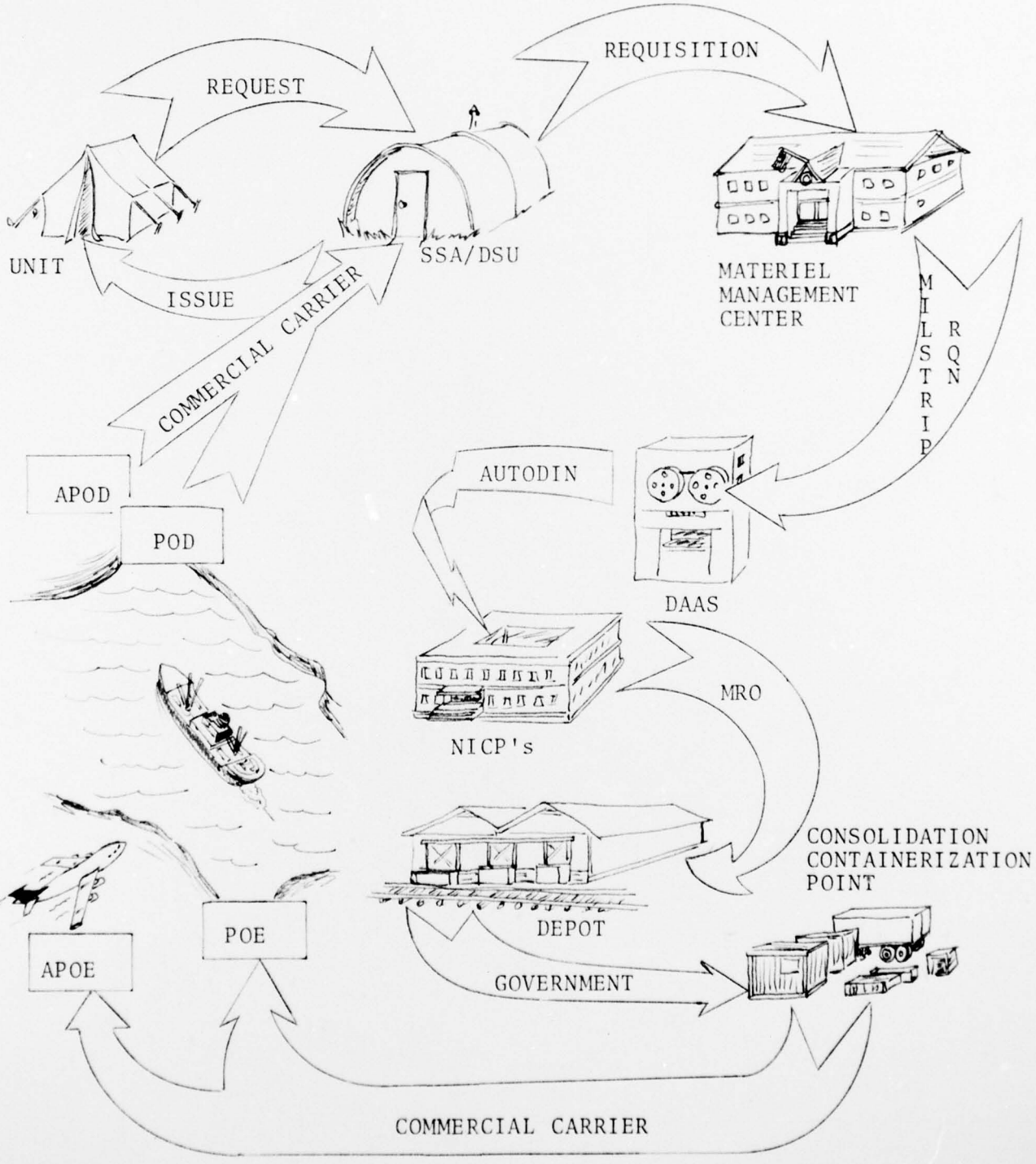
1976

CYCLE SEGMENT	EUROPE	KOREA	OKINAWA	THAILAND	JAPAN	HAWAII	CONUS
Requisitioning and Passing Actions	5	7	7	7	7	7	4
NICP Processing	3	3	3	3	3	3	3
Depot Processing	5	5	5	5	5	5	5
Intransit to CRP	NA	NA	NA	NA	NA	NA	NA
Intransit to CCP	2	2	2	2	2	2	NA
CCP Processing, Intransit to POE, POE Processing	10	14	14	14	16	11	NA
Intransit POE to POD	10	15	18	32	12	5	NA
POD Processing	2	3	1	1	1	1	NA
Intransit DSU/SSA	3	1	1	1	1	1	NA
CRP Receipt to Delivery	NA	NA	NA	NA	NA	NA	1
DSU/SSA Processing	5	5	5	5	5	5	5
Total OST in Calendar Days	45	55	56	70	52	40	20

U.S. Department of the Army, Field Manual 38-725, Direct Support System (DSS) (Washington: Government Printing Office, January 1976), p. 1-6.

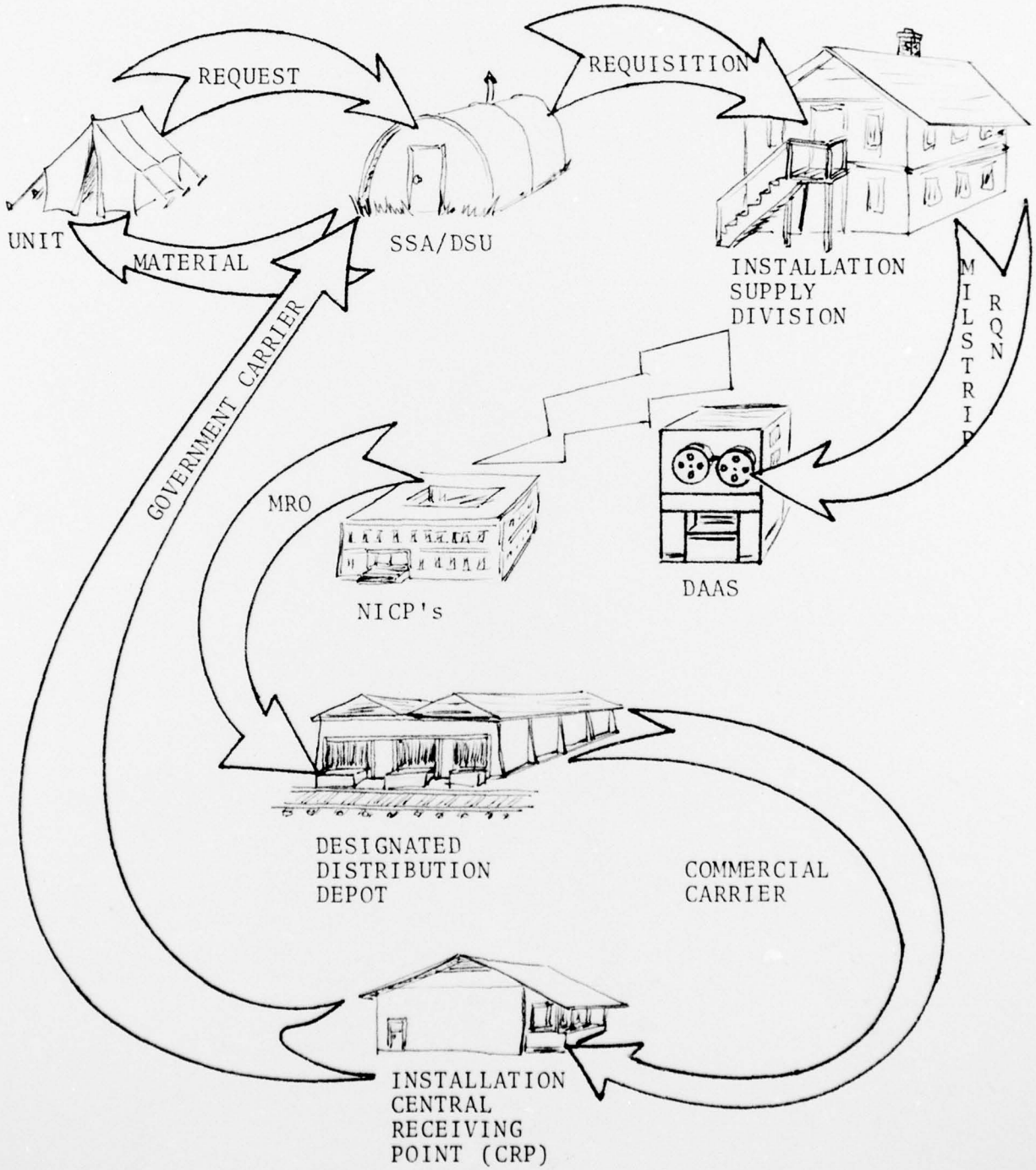
DSS OVERSEAS - CONUS

FLOW OF REQUISITIONS AND MATERIAL



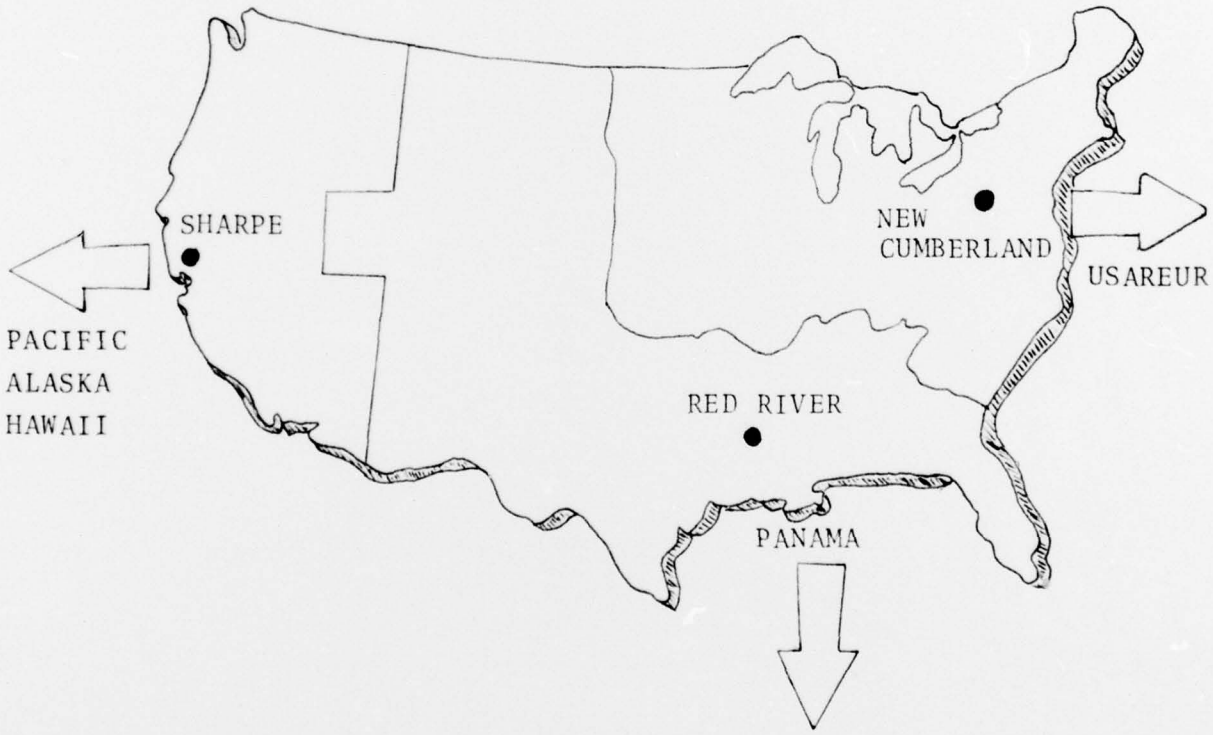
DSS CONUS

FLOW OF REQUISITIONS AND MATERIAL



DSS DISTRIBUTION DEPOTS

SUPPORT AREAS



CLASSES OF SUPPLY INCLUDED IN DSS

CLASS II - Clothing, individual equipment, tentage, tool sets and tool kits, hand tools, administrative and housekeeping supplies and equipment.

CLASS III - Packaged POL only.

CLASS IV - Construction/bare development materials.

CLASS V - Missile items only.

CLASS VII - Major end items of equipment prescribed in authorized tables.

CLASS IX - Repair parts including expendables and consumables.

NOTE: Class of supply of an item may be determined by checking the Army Master Data File (AMDF).

NOTE: Classified/protected/sensitive items requiring signature service and material requiring refrigeration will not be included in DSS.

COST ANALYSIS

1. Shipments within CONUS to the CCP's from various DA, GSA, and DSA Depots are costed by individual weights of each shipment. These types of shipments are made by Commercial Carrier, US Parcel Post, and United Parcel Service.

2. Shipments within CONUS to the CRP's from the various depots are attempting to be made with the use of a dedicated commercial truck service. The dedicated truck picks up DSS freight from the various depots enroute to a CRP. Cost for this service varies according to the number of stops (depots) as well as the weight of the freight carried.

3. Seavan/container shipments from the CCP's to the DSU/SSA's:

Sharpe Army Depot to:
- Korea . . . . $30.90 Per Measurement Ton
- Japan . . . . $26.32 " " "
- Thailand . . $50.00 " " "
- Okinawa . . . $36.00 " " "
- *Alaska
- *Hawaii

New Cumberland Army Depot to:
- Europe . . . $25.90 " " "

Red River Army Depot to:
- Panama . . . $39.90 " " "

*Considered CONUS locations, and rates are charged according to CONUS structure.

4. Air Force 463L Pallet shipments from APOE to APOD:

Travis AFB to:	Japan	$ .76 Per Pound
	Thailand	$1.27 " "
	Okinawa	$ .90 " "
	Hawaii	$ .34 " "
McCord AFB to:	Korea	$ .88 " "
	Alaska	$ .21 " "
Dover AFB to:	Germany	$ .56 " "
Charleston AFB to:	Panama	$ .26 " "

CONCLUSION

Segment time standards within the total Order Ship Time of the Direct Support System have been established for truly ideal conditions and situations. Some have been established for a situation that is planned to exist in future years (Depot to CCP Segment), others have been affected by unplanned circumstances (Computer change-over).

Controls have been established to monitor and measure the performance within each segment of the total Order Ship Time, and emphasis can be placed on areas that are not meeting established goals. Until realistic segment times are established which are flexible enough to consider current situations, the total Order Ship Time goal will continue to be exceeded.

Command emphasis and awareness of the Direct Support System at all levels is required if the system is to be improved and considered a total success. Also, the program would be greatly enhanced if trained personnel were available at all levels within the system.

In retrospect, the Order Ship Time for U.S. Army units both in the Pacific and Europe has been reduced considerably when the Direct Support System is compared to CONUS supply responses (averaging over 100 days) prior to 1970. As the Direct Support System is improved, and realistic time segment goals are established, the inventory in motion principle will show considerable savings in money and time. In a period of rising costs and funding constraints, savings in our Logistics System is clearly essential.

ACRONYMS

AMC . . . . . Army Materiel Command

APOD . . . . . Aerial Port of Debarkation

APOE . . . . . Aerial Port of Embarkation

ASL . . . . . Authorized Stockage List

CCP . . . . . Consolidation and Containerization Point

CONUS . . . . . Continental United States

CRP . . . . . Central Receiving Point

DA . . . . . Department of the Army

DARCOM . . . . Development and Readiness Command (formerly AMC)

DLOGS . . . . . Division Logistics System

DOD . . . . . Department of Defense

DLA . . . . . Defense Logistics Agency (formerly DSA)

DSS . . . . . Direct Support System

DSU . . . . . Direct Support Unit

GSA . . . . . General Services Administration

LCA . . . . . Logistics Control Activity

LIF . . . . . Logistics Intelligence File

MRO . . . . . Materiel Release Order

NICP . . . . . National Inventory Control Point

NCR . . . . . National Cash Register

NORS . . . . . Not Operationally Ready Supply

OST . . . . . Order Ship Time

POD . . . . . Port of Debarkation

POE . . . . . Port of Embarkation

SSA . . . . . Supply Support Activity

TASL . . . . . Theater Authorized Stockage List

USAREUR . . . . United States Army Europe

USARPAC . . . . United States Army Pacific

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